



# ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-80C2B1F      BYPASS RATIO: 5.1  
 UNIQUE ID NUMBER: 1GE024      PRESSURE RATIO ( $\pi_{00}$ ): 30.1  
 COMBUSTOR:  
 ENGINE TYPE: TF      RATED THRUST ( $F_{00}$ ) (kN): 254.3

### REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
D <sub>p</sub> /F <sub>00</sub> (g/kN) or SN	16.0	63.9	45.5	8.3
AS % OF ORIGINAL LIMIT	81.7	54.2	45.4	45.4
AS % OF CAEP/2 LIMIT (NO <sub>x</sub> )			56.7	
AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )			67.7	
AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )			76.8	
AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )			90.3	

### DATA STATUS

- PRE-REGULATION  
 - CERTIFICATION  
 x REVISED (SEE REMARKS)

### TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES  
 - DEDICATED ENGINES TO PRODUCTION STANDARD  
 - OTHER (SEE REMARKS)

### EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE  
 (ANNEX 16 VOLUME II)

### CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)  
 x OUT OF PRODUCTION (DATE: - )  
 - OUT OF SERVICE (DATE: - )

### MEASURED DATA

MODE	POWER SETTING (%F <sub>00</sub> )	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO <sub>x</sub>	
TAKE-OFF	100	0.7	2.341	0.08	0.52	27.73	7.1
CLIMB OUT	85	2.2	1.901	0.09	0.52	21.07	4.8
APPROACH	30	4.0	0.621	0.20	2.21	9.00	2.3
IDLE	7	26.0	0.199	9.88	44.32	3.78	3.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			809	3127	14270	10528	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				3	3	3	3
AVERAGE D <sub>p</sub> /F <sub>00</sub> (g/kN) or AVERAGE SN (MAX)				12.3	56.1	41.4	7.1
SIGMA (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)				1.3	3.0	2.0	1.1
RANGE (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)				11.22-13.48	53.51-58.88	39.83-43.77	5.7-7.5

### ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS  
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

### ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.4-97.8
TEMPERATURE (K)	287-296
ABS HUMIDITY (kg/kg)	0.0084-0.014

### FUEL

SPEC	Jet A
H/C	1.94
AROM (%)	15.3

MANUFACTURER: General Electric Company  
 TEST ORGANIZATION: CF6 Eval Engineering  
 TEST LOCATION: Site IIIC, PTO, Peebles, Ohio  
 TEST DATES: 29/05/1985-03/06/1985

### REMARKS

1. Ref GE Report R87AEB208 Rev A. (Jan 88).
2. Engine S/N's 690105 and 690005/2.

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)